

REMARKS

Summary

Prior to entry of the foregoing amendment, Claims 10-11 and 18-20 were pending in the present application. Claim 10-11 and 18-20 have been canceled without prejudice or disclaimer. New Claims 21-24 have been added without adding new matter. Upon entry of the foregoing amendment, Claims 21-24 are pending in the present application, with Claims 21, 23 and 24 being independent claims and Claim 22 being a dependent claim. Applicants respectfully request consideration of Claims 21-24 in view of the amendments above and the remarks below.

Rejections Under 35 USC § 101

Claims 18-20 were rejected under 35 U.S.C. § 101. Claims 18-20 have been canceled and the rejections thereof are not discussed further herein. Furthermore, all of the claims pending in the application, i.e., new Claims 21-22 are directed to statutory subject matter. For example, Claim 21 is directed to an image processing method performed by an image processing apparatus, i.e., the image processing method is tied to a machine or device, i.e., image processing apparatus. Furthermore, the method transforms the underlying subject matter, i.e., color conversion processing is performed on input data and the resultant data on which the color conversion has been performed is output to a printer unit.

Rejections Under 35 USC § 103

Claims 10, 18 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nakajima et al. (U.S. Patent No, 6,882,447) (hereinafter, "Nakajima et al.") in view of Simske (U.S. Patent No. 7,254,270) (hereinafter "Simske").

Claims 11 and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over Nakajima in view of Simske as applied to Claim 10 and further in view of Katayama (U.S. Patent No. 6,906,827) (hereinafter, "Katayama").

Claims 10, 11 and 18-20 have been canceled and the rejections thereof are not discussed herein. As described below new Claims 21-22 are neither anticipated by nor rendered obvious by the Nakajima, Simske and Katayama references.

Claim 21 is directed to an image processing apparatus for performing a color conversion on print data and outputting the print data on which the color conversion is performed to a printer unit. The image processing apparatus of Claim 21 includes: “a first determining unit configured to determine whether monochrome output has been specified by a user; a second determining unit configured to determine whether each picture object included in the print data is a color object; a setting unit configured to set, for the print data, a first mode for calculating the color conversion for the print data at a high bit-depth or a second mode for calculating the color conversion at a low bit-depth based on results of the determinations by the first determining unit and the second determining unit; and a color conversion unit configured to perform the color conversion on the print data based on a mode set by the setting unit and to generate output data to be output by the printer unit, wherein the setting unit is configured to set the second mode when the first determining unit determines that the monochrome output has been specified by the user, wherein the setting unit is configured to set the first mode when the first determining unit determines that the monochrome output has not been specified by the user and the second determining unit determines that the color object is included in the print data, and wherein the setting unit is configured to set the second mode when the first determining unit determines that the monochrome output has not been specified by the user and the second determining unit determines that the color object is not included in the print data.”

The Nakajima et al. reference teaches determining whether a draw object is draw data or image data, and switching color conversion tables. However, the Nakajima et al. reference fails to teach or suggest controlling the bit-depth for the color conversion.

The Simske reference teaches analyzing scanned image data and classifying various regions within an image, in column 1. The Simske reference also teaches processing a photograph region with higher resolution and bit depth, and processing a drawing region with lower resolution and bit depth. However, in the Simske reference, the bit depth is controlled for each region. Furthermore, in the Simske reference, the determination as to whether the region is a color object is not performed for controlling the bit depth.

Furthermore, neither the Nakajima et al. reference nor the Simske references teaches or suggests “a first determining unit configured to determine whether monochrome output has been specified by a user.” Therefore, neither of these references teaches or suggests “a setting unit configured to set, for the print data, a first mode for calculating the color conversion for the print data at a high bit-depth or a second mode for calculating the color conversion at a low bit-depth based on results of the determinations by the first determining unit and the second determining unit.”

As described above, Claim 21 includes features not taught or suggested by the Nakajima et al. reference and the Simske reference, when taken either alone or in combination. Furthermore, the Katayama reference does not cure the above-described deficiencies of the Nakajima et al. reference and the Simske reference. Claim 21 is not rendered obvious by the Nakajima et al. reference, the Simske reference and the Katayama reference. Claim 21 is believed to be in condition for allowance. Accordingly, Applicants respectfully request indication of such allowance.

Claims 23 and 24 include features similar to those of Claim 21. Claims 23 and 24 are believed allowable for at least the same reasons as Claim 21.

The remaining claim, i.e., Claims 22 is a dependent claim depending from Claim 21. Because Claim 21 is believed allowable, Claim 22 which depends therefrom is also believed allowable for at least the same reasons as discussed above with reference to Claim 21. Furthermore, Claim 22 is also deemed to define an additional aspect of the invention, and individual consideration on its own merits is respectfully requested.

CONCLUSION

Applicant respectfully submits that all of the claims pending in the application meet the requirements for patentability and respectfully requests that the Examiner indicate the allowance of such claims.

Any amendments to the claims which have been made in this response which have not been specifically noted to overcome a rejection based upon prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

If any additional fee is required, please charge Deposit Account Number 502456.

Should the Examiner have any questions, the Examiner may contact Applicant's representative at the telephone number below.

Respectfully submitted,

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/Marlene Klein/

Date

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